Docker containers :-

Runtime instance of an image.

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* when the server is turned on, OS claims all the resources (hardware).
* On top of OS, we install container engine such as docker.
* Container engine then takes OS resources and carves them into isolated constructs called Containers.

Each container looks smells & feels like a real OS

Isolated constructs of hypervisor called VMs.

Each VM looks smells & feels like a real machine.

Hypervisors perform Hardware Virtualization

Containers perform OS virtualization

* Container model is leaner & more efficient than VMs.
* One drawback of container model is security. Containers are less secure & provide less workload isolation.

killing the main process in the container will kill the container.

Ctrl-PQ to exit container without killing its main process.

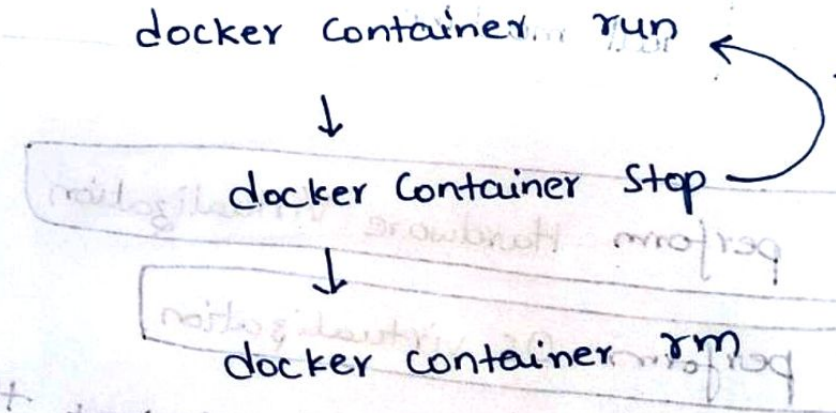
`docker run -it ubuntu:latest /bin/bash`

- `docker run` → run a new container
- `-it` → makes the container interactive & connect to terminal
- `ubuntu:latest` → Image
- `/bin/bash` → Specific Application to run

`docker container exec -it "container ID" container.`

starts a new process inside a running

Container life cycle



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docker container inspect.